Reference Ranges in Males

Males	All	20 to 29			30 to 39			40 to 49			50 to 59			60 to 69		
	(n = 91)	(n = 19)			(n = 17)			(n = 19)			(n = 20)			(n = 16)		
	Mean \pm SD	Lower	Mean	Upper												
LV Trabeculation	Trabeculation															
Global FD	1.216 ± 0.029	1.141-1.156	1.199	1.243-1.257	1.148-1.163	1.206	1.250-1.264	1.155-1.169	1.213	1.256-1.271	1.161-1.176	1.220	1.263-1.284	1.168-1.183	1.226	1.270-1.284
Mean Apical FD	1.235 ± 0.040	1.147-1.167	1.226	1.286-1.306	1.150-1.170	1.230	1.290-1.310	1.153-1.173	1.233	1.293-1.313	1.157-1.177	1.236	1.296-1.316	1.160-1.180	1.240	1.300-1.320
Max Apical FD	1.293 ± 0.039	1.209-1.229	1.286	1.344-1.363	1.212-1.231	1.289	1.347-1.366	1.215-1.234	1.292	1.350-1.369	1.218-1.237	1.295	1.353-1.372	1.221-1.240	1.298	1.356-1.375
Global Myocardial Strain																
Circumferential*, %	19.6 ± 2.1	15.1-16.2	19.4	22.5-23.6	15.2-16.3	19.4	22.6-23.7	15.3-16.4	19.5	22.7-23.8	15.4-16.5	19.6	22.8-23.9	15.5-16.6	19.7	22.9-24.0
Radial, %	42.7 ± 8.1	24.5-28.6	40.8	53.0-57.1	25.3-29.4	41.6	53.8-57.9	26.1-30.2	42.4	54.6-58.7	26.9-31.0	43.2	55.4-59.5	27.7-31.8	44.0	56.2-60.3
Longitudinal*, %	18.4 ± 2.3	14.2-15.2	18.4	21.5-22.6	14.3-15.3	18.4	21.6-22.6	14.3-15.4	18.5	21.6-22.7	14.4-15.4	18.6	21.7-22.7	14.5-15.5	18.6	21.8-22.8

^{*}Circumferential and longitudinal strain reported as absolute values. Upper and lower limits reflect indeterminate regions (95% CIs of reference limits)

Reference Ranges in Females

Females	All	20-29			30-39			40-49			50-59			60-69		
	(n = 89)	(n = 16)			(n = 18)			(n = 17)			(n=20)			(n = 18)		
	$Mean \pm SD$	Lower	Mean	Upper												
LV Trabeculation	Trabeculation															
Global FD	1.195 ± 0.029	1.133-1.146	1.190	1.232-1.247	1.134-1.149	1.191	1.234-1.249	1.136-1.150	1.193	1.236-1.250	1.138-1.152	1.195	1.238-1.252	1.140-1.154	1.197	1.240-1.254
Mean Apical FD	1.197 ± 0.044	1.109-1.131	1.197	1.264-1.286	1.109-1.131	1.197	1.263-1.286	1.108-1.131	1.197	1.263-1.285	1.108-1.130	1.197	1.263-1.285	1.108-1.130	1.196	1.263-1.285
Max Apical FD	1.261 ± 0.045	1.174-1.197	1.265	1.333-1.355	1.173-1.196	1.263	1.331-1.354	1.172-1.194	1.262	1.330-1.353	1.170-1.193	1.261	1.329-1.351	1.169-1.191	1.259	1.327-1.350
Global Myocardial Strain																
Circumferential*, %	22.8 ± 2.6	15.0-16.3	20.2	24.1-25.4	16.0-17.3	21.2	25.1-26.4	17.1-18.4	22.2	26.1-27.4	18.1-19.4	23.3	27.1-28.4	19.1-20.4	24.3	28.2-29.5
Radial, %	53.9 ± 10.5	23.8-29.1	44.8	60.6-65.8	27.4-32.7	48.5	64.2-69.5	31.1-36.3	52.1	67.8-73.1	34.7-39.9	55.7	71.5-76.7	38.3-43.6	59.3	75.1-80.3
Longitudinal*, %	21.2 ± 2.4	16.9-17.9	21.1	24.2-25.3	17.0-18.0	21.2	24.3-25.4	17.1-18.2	21.3	24.5-25.5	17.3-18.3	21.5	24.6-25.7	17.4-18.4	21.6	24.7-25.8

^{*}Circumferential and longitudinal strain reported as absolute values. Upper and lower limits reflect indeterminate regions (95% CIs of reference limits)